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| 10/799,495   | 03/12/2004  | Keiichi Sando               | 9976-26US(OB0054US) | 8267             |
| 570. 7590 07/09/2008<br>PANITCH SCHWARZE BELISARIO & NADEL, LLP<br>ONE COMMERCE SQUARE<br>2005 MARKET STREET, SUITE 2200<br>PHILADELPHIA, PA 19103 |             |                             |                     |                  |
| EXAMINER<br>RILEY, MARCUS T  |             |                             |                     |                  |
| ART UNIT<br>2625   |             | PAPER NUMBER                |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

### Office Action Summary

**Application No.**

10/799,495

**Applicant(s)**

SANDO, KEIICHI

**Examiner**

MARCUS T. RILEY

**Art Unit**

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) 3 and 13 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 2, 4-12 and 14-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 03/27/2008; 06/14/2004  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### Response to Amendment

1. This office action is responsive to applicant's remarks received on March 27, 2008. **Claims 1-2, 4-12 & 14-20** remain pending. **Claims 3 & 13** have been cancelled.

### Response to Arguments

2. Applicant's arguments with respect to amended **claims 1, 2, 11 & 12** filed on March 27, 2008 have been fully considered but they are not persuasive.

### A: Applicant's Remarks

*The Examiner rejected claims 1-3 and 11-13 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 7,180,626 (Gassho et al.) in view of U.S. Patent Application Publication No. 2003/0133152 (Matsueda). The Examiner states that Gassho et al. discloses all the elements of claims 1 and 11 except for a notifying unit and that Matsueda discloses a notifying unit. Applicant respectfully traverses the rejection.*

*Gassho et al. is directed to a printing system arranged on a network including: (1) a plurality of client computers, (2) a plurality of printers, each of which has a job status monitor unit and a printer status monitor unit, and (3) a print load distribution apparatus which includes a job status monitor unit and a printer status monitor unit. When a print job is sent from a client computer to a printer selected by the client, the print job is temporarily stored in the selected printer. The print job status monitor in the print load distribution apparatus receives an*

*indication of the printer congestion (queue size) from the selected printer and if the congestion is high, transfers the print job to another printer having a shorter queue. The management of the printers is transparent to the client computer and as the Examiner has stated, no notification is provided to the client computers about a change in shared printers.*

*Matsueda is directed to a printing system arranged on a network including: (1) a client apparatus, (2) a server and (3) a printer. In response to a print request from a client apparatus, a printer is instructed to form a memory box for managing the job information in a memory apparatus of the printer. When the job information is inputted and registered into the memory box, the client apparatus is notified of printer management information of the job information inputted and registered into the memory box (see Abstract and paragraph [0016]).*

*Figs. 4 and 5 and paragraphs [0064] and describe what is meant by "notification of printer management information". In particular the notification (steps ST48, ST58) provided to the client occurs at the time that the print job is successfully stored in the printer memory box and includes the name of the printer, the location of the printer, the memory box number, the password etc. In Fig. 6, step S74 the client is notified of an error message that printing could not be performed at the time that the print job is queued to the printer.*

*The present application is directed to notifying a client when a state of a printer changes from a shared printer state to being deleted from the network. An embodiment of the present invention uses a shared printer monitor unit in a print server to manage shared printers located in a printer folder of, for example, a Windows operating system. When the shared printer monitoring unit receives from Windows that a change in the state of a printer in the printer folder has occurred, the change is correlated with the shared printer information stored in a*

*storing unit. If the change indicates that a shared printer has been deleted from the network, notification is sent to the client computers along with the name of the printer that has been deleted. If the shared printer is replaced by a new printer having a different name, notification of the name of the new printer is sent to the client computers.*

*Amended claim 1 recites:*

*(Currently amended) A print system comprising:*

*a printer monitoring unit which monitors whether there is a change in a shared printer for executing a printing process from a client;*

*a storing unit which stores shared printer information about the shared printer, the shared printer information showing whether the printer has been previously set for sharing," and*

*a notifying unit which, in the case where the change of the printer previously set for sharing has been detected and said monitoring unit determines that the shared setting is invalid, notifies said client that the sharing of the printer has been canceled, the notice including a name of the canceled printer.*

*Neither Gassho et al. nor Matsueda teach or suggest either: (1) a monitoring unit which monitors whether there is a change in shared printers, and (2) a notifying unit which notifies a client when the sharing of a previously shared printer has been canceled, i.e. deleted from the network.*

*Gassho et al. merely transfers a print job to another printer when the printer to which the print job has been queued is not available or overloaded and does not teach or suggest notifying the client when a printer has been deleted from the network. Matsueda notifies a client only when a print job has been successfully stored in a printer or when an error occurs that prevents*

*the printing of a print job at the time the print job is queued to the printer and does not notify the client when a change of a printer previously set for sharing is deleted from the network. Consequently, the combination of Gassho et al. and Matsueda, does not make amended claim 1 obvious. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §103 rejection of claim 1.*

*Amended claim 11 is patentable over Gassho et al. and Matsueda for the same reasons that amended claim 1 is patentable.*

*Further, it is respectfully submitted that since claims 1 and 11 have been shown to be allowable, claims 2 and 12 dependent on claims 1 and 11 respectively are allowable, at least by their dependency. Accordingly, for all the above reasons, Applicants respectfully request reconsideration and withdrawal of the §103 rejection of claims 2 and 12.*

*The Examiner rejected claims 4 and 14 as under 35 U.S.C. §103(a) as being unpatentable over the combination of Gassho et al. and Matsueda, and further in view of U.S. Patent No. 7,162,449 (Drummond). Applicant respectfully traverses the rejection.*

*Drummond does not teach or suggest 1) a monitoring unit which monitors whether there is a change in shared printers, and (2) a notifying unit which notifies a client when the sharing of a previously shared printer has been canceled. Accordingly, claims 4 and 14, dependent on claims 1 and 11 respectively, are allowable at least by their dependency.*

*The Examiner rejected claims 5 and 15 as under 35 U.S.C. §103(a) as being unpatentable over the combination of Gassho et al. and Matsueda, and further in view of Matsueda. Applicant respectfully traverses the rejection.*

*Matsueda does not teach or suggest 1) a monitoring unit which monitors whether there is a change in shared printers, and (2) a notifying unit which notifies a client when the sharing of a previously shared printer has been canceled. Accordingly, claims 5 and 15, dependent on claims 1 and 11 respectively, are allowable at least by their dependency.*

*The Examiner rejected claims 6 and 16 as under 35 U.S.C. §103(a) as being unpatentable over the combination of Gassho et al. and Matsueda, and further in view of Drummond. Applicant respectfully traverses the rejection.*

*Drummond does not teach or suggest 1) a monitoring unit which monitors whether there is a change in shared printers, and (2) a notifying unit which notifies a client when the sharing of a previously shared printer has been canceled. Accordingly, claims 6 and 16, dependent on claims 1 and 11 respectively, are allowable at least by their dependency.*

*The Examiner rejected claims 7-10 and 17-20 as under 35 U.S.C. § 103(a) as being unpatentable over the combination of Gassho et al. and Matsueda, and further in view of U.S. Patent Application Publication No. 2003/0179404 (the Matsueda '404 publication). Applicant respectfully traverses the rejection.*

*Matsueda does not teach or suggest 1) a monitoring unit which monitors whether there is a change in shared printers, and (2) a notifying unit which notifies a client when the sharing of a previously shared printer has been canceled. Accordingly, claims 7-10 and 17-20, dependent on claims 1 and 11 respectively, are allowable at least by their dependency.*

*Conclusion*

Art Unit: 2625

*Insofar as the Examiner's objections and rejections have been fully addressed, the instant application, including claims 1-2, 4-12 and 14-20, is in condition for allowance and Notice of Allowability of claims 1-2, 4-12 and 14-20 is therefore earnestly solicited.*



**A: Examiner's Response**

Matsueda '152 discloses a notifying unit ("*...the notifying means notifies the client apparatus of the printer management information including the box number of the memory box formed in the printer apparatus.*" page 2, paragraph 0020).

Gassho '626 and Matsueda either alone or in combination does teach or suggest either:

(1) Gassho '626 discloses a monitoring unit which monitors whether there is a change in shared printers ("*The present invention relates to a printing system where a plurality of printing apparatuses, each including a printing mechanism and a spool buffer, and at least one information processing apparatus outputting a print job are mutually connected.*" column 1, lines 6-9). See also ("*The available printer specification unit 650 then informs the available printer monitor unit 651 of a printer ID assigned to the selected available printer [c]. When there is no available printer, information representing the fact (for example, 'no availability') is notified.*" column 18, lines 29-33). Here, Gassho '626 discloses a plurality of printing apparatuses which are mutually connected. Furthermore, Gassho '626 discloses a printer monitoring unit 651 which sends a notification message if there is a change in the shared printer's availability. One skilled in the art would understand that the printers and shared because they are mutually connected and the printer monitoring unit 651, in Gasso '626, monitors whether there is a change in shared printers because of the change in availability.

(2) Matsueda '152 discloses a notifying unit which notifies a client when the sharing of a previously shared printer has been canceled, i.e. deleted from the network. ("*According to a seventh aspect of the invention, the server apparatus further comprises searching means for searching whether a printer apparatus which can process the job information exists on the*

*network or not when it is confirmed by the confirming means that the memory box cannot be formed, wherein when the printer apparatus which can form the memory box is searched by the searching means, the notifying means notifies the client apparatus of the printer management information including the box number of the memory box formed in the printer apparatus.”* page 2, paragraph 0020). Here, Matsueda ‘152 searches whether a printer apparatus which can process the job information exists on the network or not, and notifying means which notifies the client apparatus of the printer management information. One skilled in the art would understand that if a printer is not on the network, it has been cancelled or deleted. Furthermore, notifying the client apparatus of the printer management information including the box number of the memory box formed in the printer apparatus is notification to a client that a printer has been deleted.

Consequently, the combination of Gassho et al. and Matsueda, does make amended claim 1 obvious. Accordingly, Applicant's arguments with respect to amended claim 1, has been fully considered but they are not persuasive. Thus, Claim Rejections - 35 USC §103 is not withdrawn.

Amended claim 11 is not patentable over Gassho et al. and Matsueda for the same reasons that amended claim 1 is not patentable.

Since claims 1 and 11 have been shown not to be allowable, claims 2 and 12 dependent on claims 1 and 11 respectively are not allowable, at least by their dependency. Accordingly, with respect to claims 2 and 12, Claim Rejections - 35 USC §103 is not withdrawn.

Claims 4 and 14, dependent on claims 1 and 11 respectively, are not allowable at least by their dependency.

Claims 5 and 15, dependent on claims 1 and 11 respectively, are not allowable at least by their dependency.

Claims 6 and 16, dependent on claims 1 and 11 respectively, are allowable at least by their dependency.

Claims 7-10 and 17-20, dependent on claims 1 and 11 respectively, are allowable at least by their dependency.

Applicant's amendment, including claims 1-2, 4-12 and 14-20, have been fully considered but they are not persuasive. Accordingly, the application is not in condition for allowance.

**Claim Objections**

3. **Claims 4 and 14** are objected to under 37 CFR 1.75(e), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

**Regarding claim 4; Claim 4** is dependent upon cancelled **claim 3**. This appears to be a typographical error. It is assumed for continued examination purposed the **claim 4** is dependent upon **claim 1**.

**Regarding claim 14; Claim 4** is dependent upon cancelled **claim 13**. This appears to be a typographical error. It is assumed for continued examination purposed the **claim 14** is dependent upon **claim 11**.

4. **Claim 11** is objected to because of the following informalities: **Claim11** states in part *"...notifying said client there is the change in shared printers, by a notifying unit, in the case where the change is detected by said printer monitoring unit..."* It appears that this is supposed to be deleted. It is assumed for continued examination purposes that this is intended to be deleted. Suggest deleting this portion. Appropriate correction is required.

**Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-2 and 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gassho et al. (US 7,180,626 B1 hereinafter, Gassho '626) in combination with Matsueda (US 2003/0133152 A1 hereinafter, Matsueda '152).

**Regarding claim 1;** Gassho '626 discloses a print system comprising: a printer monitoring unit which monitors whether there is a change in a shared printer for executing a printing process from a client (*"The present invention relates to a printing system where a plurality of printing apparatuses, each including a printing mechanism and a spool buffer, and at least one information processing apparatus outputting a print job are mutually connected."* column 1, lines 6-9). See also (*"The available printer specification unit 650 then informs the available printer monitor unit 651 of a printer ID assigned to the selected available printer [c]. When there is no available printer, information representing the fact (for example, 'no availability') is notified."* column 18, lines 29-33); a storing unit which stores shared printer information about the shared printer, the shared printer information showing whether the printer has been previously set for sharing (*"...a job status monitor unit 111 stores the monitoring results of the job status transmitted from the respective printers 50, 60, and 70 and monitors the congestion status of the print jobs stored in each buffer 55. A printer status monitor unit 112 stores the monitoring results of the printer status transmitted from the respective printers 50, 60, and 70 and monitors the working status of each printing mechanism 51. In the above discussion, it is explained that the print load distribution apparatus 80 monitors the printer status and the job status with regard to the three printers 50, 60, and 70 among the plurality of printers connected to the computer network 90. In the actual operations, however, printer IDs for*

*identifying the respective printers of interest, which are the objects to be monitored, have been stored in advance in a group information storage unit 113 included in the print load distribution apparatus 80. (In this embodiment, printer IDs of the three printers 50, 60, and 70 have been stored). The print load distribution unit 80 refers to the printer IDs and monitors the printer status and the job status of any desired printer. The printer IDs may be replaced by any piece of information for identifying the respective printers; for example, network addresses or IP addresses.” column 10, lines 58-67 thru column 11, lines 1-13).*

Gassho ‘626 does not expressly disclose a notifying unit which, in the case where the change of the printer previously set for sharing has been detected; and said monitoring unit determines that the shared setting is invalid; notifies said client that the sharing of the printer has been canceled, the notice including a name of the canceled printer.

Matsueda ‘152 discloses a notifying unit which, in the case where the change of the printer previously set for sharing has been detected (“*According to a seventh aspect of the invention, the server apparatus further comprises searching means for searching whether a printer apparatus which can process the job information exists on the network or not when it is confirmed by the confirming means that the memory box cannot be formed, wherein when the printer apparatus which can form the memory box is searched by the searching means, the notifying means notifies the client apparatus of the printer management information including the box number of the memory box formed in the printer apparatus.*” page 2, paragraph 0020); and said monitoring unit determines that the shared setting is invalid (“*If it is determined in step S84 that the printer to be monitored does not exist, the processing routine is returned to step S81 and the timer is activated again. For example, in the case of the client B or the like, since there is*

*no printer to be monitored, the processing routine is returned to step S81. If it is determined in step S84 that the printer to be monitored exists, the printer information of the printer 82 or the like is selected in step S85. In step S86, the number of the box formed by the box No. 88 is read out. In step S87, the presence or absence of the box number is discriminated. If it is determined that there is no box number, for example, if the memory box printing is not executed, since both of the box No. 88 and the password 89 are not set, the processing routine is returned from step S87 to step S83. If it is determined in step S87 that the box number exists, in step S88, the printer is inquired about whether printed matter exists in the box number or not by using a communication command with reference to the job in the memory box.” page 5, paragraph 0098-0101); notifies said client that the sharing of the printer has been canceled, the notice including a name of the canceled printer (“According to a seventh aspect of the invention, the server apparatus further comprises searching means for searching whether a printer apparatus which can process the job information exists on the network or not when it is confirmed by the confirming means that the memory box cannot be formed, wherein when the printer apparatus which can form the memory box is searched by the searching means, the notifying means notifies the client apparatus of the printer management information including the box number of the memory box formed in the printer apparatus.” page 2, paragraph 0020).*

Gassho ‘626 and Matsueda ‘152 are combinable because they are from same field of endeavor of network printer systems (“*The invention relates to a server apparatus which can communicate with a printer apparatus connected to a network...*” Matsueda ‘152 at page 1, paragraph 0002).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer system as taught by Gassho '626 by adding a notifying unit which, in the case where the change of the printer previously set for sharing has been detected; and said monitoring unit determines that the shared setting is invalid; notifies said client that the sharing of the printer has been canceled, the notice including a name of the canceled printer as taught by Matsueda '152.

The motivation for doing so would have been to freely construct a job processing environment having high usefulness which can establish a system for developing a remote print service (*"...to freely construct a job processing environment having high usefulness which can establish a system for developing a remote print service."* Matsueda '152 at column 5, lines 1-2).

Therefore, it would have been obvious to combine Gassho '626 with Matsueda '152 to obtain the invention as specified in claim 1.

**Regarding claim 2;** Gassho '626 discloses wherein said printer monitoring unit compares received printer information with the shared printer information stored in said shared printer information storing unit, thereby determining that the change occurred in the printers (*"...a job status monitor unit 111 stores the monitoring results of the job status transmitted from the respective printers 50, 60, and 70 and monitors the congestion status of the print jobs stored in each buffer 55. A printer status monitor unit 112 stores the monitoring results of the printer status transmitted from the respective printers 50, 60, and 70 and monitors the working status of each printing mechanism 51. In the above discussion, it is explained that the print load distribution apparatus 80 monitors the printer status and the job status with regard to the three*



*printers 50, 60, and 70 among the plurality of printers connected to the computer network 90. In the actual operations, however, printer IDs for identifying the respective printers of interest, which are the objects to be monitored, have been stored in advance in a group information storage unit 113 included in the print load distribution apparatus 80. (In this embodiment, printer IDs of the three printers 50, 60, and 70 have been stored). The print load distribution unit 80 refers to the printer IDs and monitors the printer status and the job status of any desired printer. The printer IDs may be replaced by any piece of information for identifying the respective printers; for example, network addresses or IP addresses.” column 10, lines 58-67 thru column 11, lines 1-13).*

**Regarding claim 11;** Gassho ‘626 discloses a printer setting method, comprising: monitoring whether there is a change in shared printers for executing a printing process from a client, by a printer monitoring unit (“*The present invention relates to a printing system where a plurality of printing apparatuses, each including a printing mechanism and a spool buffer, and at least one information processing apparatus outputting a print job are mutually connected.*” column 1, lines 6-9). See also (“*The available printer specification unit 650 then informs the available printer monitor unit 651 of a printer ID assigned to the selected available printer [c]. When there is no available printer, information representing the fact (for example, ‘no availability’)*” column 18, lines 29-33); a storing unit which stores shared printer information about the shared printer, the shared printer information showing whether the printer has been previously set for sharing (“*...a job status monitor unit 111 stores the monitoring results of the job status transmitted from the respective printers 50, 60, and 70 and monitors the congestion status of the print jobs stored in each buffer 55. A printer status monitor unit 112*

*stores the monitoring results of the printer status transmitted from the respective printers 50, 60, and 70 and monitors the working status of each printing mechanism 51. In the above discussion, it is explained that the print load distribution apparatus 80 monitors the printer status and the job status with regard to the three printers 50, 60, and 70 among the plurality of printers connected to the computer network 90. In the actual operations, however, printer IDs for identifying the respective printers of interest, which are the objects to be monitored, have been stored in advance in a group information storage unit 113 included in the print load distribution apparatus 80. (In this embodiment, printer IDs of the three printers 50, 60, and 70 have been stored). The print load distribution unit 80 refers to the printer IDs and monitors the printer status and the job status of any desired printer. The printer IDs may be replaced by any piece of information for identifying the respective printers; for example, network addresses or IP addresses.” column 10, lines 58-67 thru column 11, lines 1-13).*

Gassho ‘626 does not expressly disclose a notifying unit which, in the case where the change of the printer previously set for sharing has been detected; and said monitoring unit determines that the shared setting is invalid; notifies said client that the sharing of the printer has been canceled, the notice including a name of the canceled printer.

Matsueda ‘152 discloses a notifying unit which, in the case where the change of the printer previously set for sharing has been detected (“According to a seventh aspect of the invention, the server apparatus further comprises searching means for searching whether a printer apparatus which can process the job information exists on the network or not when it is confirmed by the confirming means that the memory box cannot be formed, wherein when the printer apparatus which can form the memory box is searched by the searching means, the

*notifying means notifies the client apparatus of the printer management information including the box number of the memory box formed in the printer apparatus.” page 2, paragraph 0020);* and said monitoring unit determines that the shared setting is invalid (“*If it is determined in step S84 that the printer to be monitored does not exist, the processing routine is returned to step S81 and the timer is activated again. For example, in the case of the client B or the like, since there is no printer to be monitored, the processing routine is returned to step S81. If it is determined in step S84 that the printer to be monitored exists, the printer information of the printer 82 or the like is selected in step S85. In step S86, the number of the box formed by the box No. 88 is read out. In step S87, the presence or absence of the box number is discriminated. If it is determined that there is no box number, for example, if the memory box printing is not executed, since both of the box No. 88 and the password 89 are not set, the processing routine is returned from step S87 to step S83. If it is determined in step S87 that the box number exists, in step S88, the printer is inquired about whether printed matter exists in the box number or not by using a communication command with reference to the job in the memory box.” page 5, paragraph 0098-0101); notifies said client that the sharing of the printer has been canceled, the notice including a name of the canceled printer (“*According to a seventh aspect of the invention, the server apparatus further comprises searching means for searching whether a printer apparatus which can process the job information exists on the network or not when it is confirmed by the confirming means that the memory box cannot be formed, wherein when the printer apparatus which can form the memory box is searched by the searching means, the notifying means notifies the client apparatus of the printer management information including the box number of the memory box formed in the printer apparatus.” page 2, paragraph 0020).**

Gassho '626 and Matsueda '152 are combinable because they are from same field of endeavor of network printer systems (*"The invention relates to a server apparatus which can communicate with a printer apparatus connected to a network..."* Matsueda '152 at page 1, paragraph 0002).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer system as taught by Gassho '626 by adding a notifying unit which, in the case where the change of the printer previously set for sharing has been detected; and said monitoring unit determines that the shared setting is invalid; notifies said client that the sharing of the printer has been canceled, the notice including a name of the canceled printer as taught by Matsueda '152.

The motivation for doing so would have been to freely construct a job processing environment having high usefulness which can establish a system for developing a remote print service (*"...to freely construct a job processing environment having high usefulness which can establish a system for developing a remote print service."* Matsueda '152 at column 5, lines 1-2).

Therefore, it would have been obvious to combine Gassho '626 with Matsueda '152 to obtain the invention as specified in claim 11.

**Regarding claim 12;** Gassho '626 discloses wherein said printer monitoring unit compares received printer information with the shared printer information stored in said shared printer information storing unit, thereby discriminating that the change occurred in the printers (*"...a job status monitor unit 111 stores the monitoring results of the job status transmitted from the respective printers 50, 60, and 70 and monitors the congestion status of the print jobs stored*

*in each buffer 55. A printer status monitor unit 112 stores the monitoring results of the printer status transmitted from the respective printers 50, 60, and 70 and monitors the working status of each printing mechanism 51. In the above discussion, it is explained that the print load distribution apparatus 80 monitors the printer status and the job status with regard to the three printers 50, 60, and 70 among the plurality of printers connected to the computer network 90. In the actual operations, however, printer IDs for identifying the respective printers of interest, which are the objects to be monitored, have been stored in advance in a group information storage unit 113 included in the print load distribution apparatus 80. (In this embodiment, printer IDs of the three printers 50, 60, and 70 have been stored). The print load distribution unit 80 refers to the printer IDs and monitors the printer status and the job status of any desired printer. The printer IDs may be replaced by any piece of information for identifying the respective printers; for example, network addresses or IP addresses.” column 10, lines 58-67 thru column 11, lines 1-13).*

7. **Claim 4 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gassho ‘626 and Matsueda ‘152 as applied to claim 1 above, and further in view of Drummond ‘449 et al. (US 7,162,449 hereinafter, Drummond ‘449).

**Regarding claim 4;** Gassho ‘626 and Matsueda ‘152 does not expressly disclose where said notifying unit notifies said client of a name of the deleted printer and a name of a print server by E-mail.

Drummond ‘449 discloses where said notifying unit notifies said client of a name of the deleted printer and a name of a print server by E-mail (“...*the fault and status messages may be*

*monitored from terminals at locations anywhere that are connected in the network. The mini-HTTP server handling status and fault messages may also be configured to send an e-mail or similar message to a selected address whenever a particular condition or group of conditions exist.*" column 29, lines 47-53).

Gassho '626 and Matsueda '152 are combinable with Drummond '449 because they are from same field of endeavor of network systems ("*system that is capable of use in a wide area network...*" Drummond '449 at column 1, lines 20-21).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network system as taught by Gassho '626 by adding where said notifying unit notifies said client of a name of the deleted printer and a name of a print server by E-mail as taught by Drummond '449.

The motivation for doing so would have been to enable messages to be communicated between distant locations ("*Communication over wide area networks enables messages to be communicated between distant locations.*" Drummond '449 at column 2, lines 27-28).

Therefore, it would have been obvious to combine Gassho '626 and Matsueda '152 with Drummond '449 to obtain the invention as specified in claim 1.

**Regarding claim 14;** Drummond '449 discloses where said notifying unit notifies said client of a name of the deleted printer and a name of a print server by E-mail ("*...the fault and status messages may be monitored from terminals at locations anywhere that are connected in the network. The mini-HTTP server handling status and fault messages may also be configured to send an e-mail or similar message to a selected address whenever a particular condition or group of conditions exist.*" column 29, lines 47-53).

8. **Claims 5 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gassho '626 and Matsueda '152 as applied to claim 1 above, and further in view of Matsueda '152.

**Regarding claim 5;** Gassho '626 and Matsueda '152 as modified, does not expressly disclose where if said change indicates a change in shared name of one of the shared printers, said notifying unit notifies said client that the shared printer name has been changed.

Matsueda '152 discloses where if said change indicates a change in shared name of one of the shared printers, said notifying unit notifies said client that the shared printer name has been changed ("*...the server apparatus further comprises searching means for searching whether a printer apparatus which can process the job information exists on the network or not when it is confirmed by the confirming means that the memory box cannot be formed, wherein when the printer apparatus which can form the memory box is searched by the searching means, the notifying means notifies the client apparatus of the printer management information including the box number of the memory box formed in the printer apparatus.*" page 2, paragraph 0020).

Gassho '626 and Matsueda '152 are combinable with Matsueda '152 because they are from same field of endeavor of network printer systems ("*The invention relates to a server apparatus which can communicate with a printer apparatus connected to a network...*" Matsueda '152 at page 1, paragraph 0002).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer system as taught by Gassho '626 by adding where if said

change indicates a change in shared name of one of the shared printers, said notifying unit notifies said client that the shared printer name has been changed as taught by Matsueda '152.

The motivation for doing so would have been to provide a job processing environment in which the user of the client apparatus can uniquely process the job information at a high speed (*"...and a job processing environment in which the user of the client apparatus can uniquely process the job information at a high speed can be freely constructed."* Matsueda '152 at page 1, paragraph 0011).

Therefore, it would have been obvious to combine Gassho '626 and Matsueda '152 with Matsueda '152 to obtain the invention as specified in claim 1.

**Regarding claim 15;** Matsueda '152 discloses where if said change indicates a change in shared name of one of the shared printers, said notifying unit notifies said client that the shared printer name has been changed (*"...the server apparatus further comprises searching means for searching whether a printer apparatus which can process the job information exists on the network or not when it is confirmed by the confirming means that the memory box cannot be formed, wherein when the printer apparatus which can form the memory box is searched by the searching means, the notifying means notifies the client apparatus of the printer management information including the box number of the memory box formed in the printer apparatus."* page 2, paragraph 0020).

9. **Claim 6 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gassho '626 and Matsueda '152 as applied to claim 1 above, and further in view of Drummond '449.



**Regarding claim 6;** Gassho '626 and Matsueda '152 as modified does not expressly disclose where said notifying unit notifies said client of information of a deleted printer and an added printer by E-mail.

Drummond '449 discloses where said notifying unit notifies said client of information of a deleted printer and an added printer by E-mail ("*...the fault and status messages may be monitored from terminals at locations anywhere that are connected in the network. The mini-HTTP server handling status and fault messages may also be configured to send an e-mail or similar message to a selected address whenever a particular condition or group of conditions exist.*" column 29, lines 47-53).

Gassho '626 and Matsueda '152 are combinable with Drummond '449 because they are from same field of endeavor of network systems ("*system that is capable of use in a wide area network...*" Drummond '449 at column 1, lines 20-21).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network system as taught by Gassho '626 by adding where said notifying unit notifies said client of information of a deleted printer and an added printer by E-mail as taught by Drummond '449.

The motivation for doing so would have been to enable messages to be communicated between distant locations ("*Communication over wide area networks enables messages to be communicated between distant locations.*" Drummond '449 at column 2, lines 27-28).

Therefore, it would have been obvious to combine Gassho '626 and Matsueda '152 with Drummond '449 to obtain the invention as specified in claim 1.

**Regarding claim 16;** Drummond '449 discloses where said notifying unit notifies said client of information of a deleted printer and an added printer by E-mail ("*...the fault and status messages may be monitored from terminals at locations anywhere that are connected in the network. The mini-HTTP server handling status and fault messages may also be configured to send an e-mail or similar message to a selected address whenever a particular condition or group of conditions exist.*" column 29, lines 47-53).

10. **Claims 7-10 and 17-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gassho '626 and Matsueda '152 as applied to claim 1 above, and further in view of Matsueda (US 2003/0179404 A1 hereinafter, Matsueda '404).

**Regarding claim 7;** Gassho '626 and Matsueda '152 does not expressly disclose a program forming unit which forms an installing program and installs it into a predetermined position, and wherein when addition of a shared printer is detected by said printer monitoring unit, said program forming unit forms an installing program of said printer and installs it into a predetermined position.

Matsueda '404 discloses a program forming unit which forms an installing program and installs it into a predetermined position, and wherein when addition of a shared printer is detected by said printer monitoring unit, said program forming unit forms an installing program of said printer and installs it into a predetermined position ("*In step S511, the server apparatus 102 notifies the client apparatus 101 of the password, box number, installing location of the printer B, and the like. Thus, the user can be secretly informed of the box number and the password. In step S512, the client apparatus 101 newly confirms the server apparatus 102 about*

*the situation of the print request. Since the print job has already been transmitted to the printer, in step S512, the server apparatus 102 notifies the client apparatus 101 that "the print data has been transmitted to the printer" or "the print data has already been printed". Thus, even if the memory box is not normally formed, since the memory box is automatically formed in another printer, the user does not need to make the print request again. If the memory box is formed in another printer, the user is notified of it via the client apparatus. Therefore, the user is not confused about into which printer he should enter the password."* page 3, paragraph 0057-0059).

Gassho '626 and Matsueda '152 are combinable with Matsueda '404 because they are from same field of endeavor of a network printer systems (*"The invention relates to a print system comprising: a client apparatus such as a personal assistant or the like; a server apparatus which receives a print request from the client apparatus and makes a printing apparatus to print; and the printing apparatus which receives the print request from the client apparatus and prints..."* Matsueda '404 at page 1, paragraph 0002).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the network printer system as taught by Gassho '626 by adding a program forming unit which forms an installing program and installs it into a predetermined position, and wherein when addition of a shared printer is detected by said printer monitoring unit, said program forming unit forms an installing program of said printer and installs it into a predetermined position as taught by Matsueda '404.

The motivation for doing so would have been to enable the user to execute printing of printed matter in good secrecy (*"...an object of the invention to enable the user to execute printing of printed matter in good secrecy."* Matsueda '404 at page 1, paragraph 0011).

Therefore, it would have been obvious to combine Gassho '626 and Matsueda '152 with Matsueda '404 to obtain the invention as specified in claim 1.

**Regarding claim 8;** Matsueda '404 discloses where said notifying unit notifies said client of information of the installing position of the installing program together with information of the printer (*"In step S411, the server apparatus 102 notifies the client apparatus 101 of the password, box number, installing location of the printer, and the like. Thus, the user can be secretly informed of the box number and the password. In step S412, the client apparatus 101 newly confirms the server apparatus 102 about the situation of the print request. Since the print job has already been transmitted to the printer, in step S412, the server apparatus 102 notifies the client apparatus 101 that "the print data has been transmitted to the printer" or "the print data has already been printed".*" page 3, paragraphs 0049-0050).

**Regarding claim 9;** Matsueda '404 discloses where said installing position is a Web page (*"Reference numeral 103 denotes the printer and 105 indicates a remote printer connected by a Web interface. When the print request is received from the user application program, the image data is held in the image managing unit 205, the job information is held in the job managing unit 206, and thereafter, the print request is transmitted to the server apparatus 102."* page 2, paragraph 0039).

**Regarding claim 10;** Matsueda '404 discloses where said program forming unit forms an installing program for direct printing and installs it into a predetermined position, and said notifying unit notifies said client of information of the installing position (*"In step S411, the server apparatus 102 notifies the client apparatus 101 of the password, box number, installing*

*location of the printer, and the like. Thus, the user can be secretly informed of the box number and the password. In step S412, the client apparatus 101 newly confirms the server apparatus 102 about the situation of the print request. Since the print job has already been transmitted to the printer, in step S412, the server apparatus 102 notifies the client apparatus 101 that “the print data has been transmitted to the printer” or “the print data has already been printed”.*” page 3, paragraphs 0049-0050).

**Regarding claim 17;** Matsueda ‘404 discloses a forming an installing program and installs it into a predetermined position by a program forming unit, wherein when addition of a shared printer is detected by said printer monitoring unit, said program forming unit forms an installing program of said printer and installs it into a predetermined position (“*In step S511, the server apparatus 102 notifies the client apparatus 101 of the password, box number, installing location of the printer B, and the like. Thus, the user can be secretly informed of the box number and the password. In step S512, the client apparatus 101 newly confirms the server apparatus 102 about the situation of the print request. Since the print job has already been transmitted to the printer, in step S512, the server apparatus 102 notifies the client apparatus 101 that “the print data has been transmitted to the printer” or “the print data has already been printed”.* Thus, even if the memory box is not normally formed, since the memory box is automatically formed in another printer, the user does not need to make the print request again. If the memory box is formed in another printer, the user is notified of it via the client apparatus. Therefore, the user is not confused about into which printer he should enter the password.” page 3, paragraph 0057-0059).

**Regarding claim 18;** Matsueda '404 discloses where said notifying unit notifies said client of information of the installing position of the installing program together with information of the printer (*"In step S411, the server apparatus 102 notifies the client apparatus 101 of the password, box number, installing location of the printer, and the like. Thus, the user can be secretly informed of the box number and the password. In step S412, the client apparatus 101 newly confirms the server apparatus 102 about the situation of the print request. Since the print job has already been transmitted to the printer, in step S412, the server apparatus 102 notifies the client apparatus 101 that "the print data has been transmitted to the printer" or "the print data has already been printed"."* page 3, paragraphs 0049-0050).

**Regarding claim 19;** Matsueda '404 discloses where said installing position is a Web page (*"Reference numeral 103 denotes the printer and 105 indicates a remote printer connected by a Web interface. When the print request is received from the user application program, the image data is held in the image managing unit 205, the job information is held in the job managing unit 206, and thereafter, the print request is transmitted to the server apparatus 102."* page 2, paragraph 0039).

**Regarding claim 20;** Matsueda '404 discloses where said program forming unit forms an installing program for direct printing and installs it into a predetermined position, and said notifying unit notifies said client of information of the installing position (*"In step S411, the server apparatus 102 notifies the client apparatus 101 of the password, box number, installing location of the printer, and the like. Thus, the user can be secretly informed of the box number and the password. In step S412, the client apparatus 101 newly confirms the server apparatus 102 about the situation of the print request. Since the print job has already been transmitted to*

*the printer, in step S412, the server apparatus 102 notifies the client apparatus 101 that “the print data has been transmitted to the printer” or “the print data has already been printed”.*”  
page 3, paragraphs 0049-0050).

### **Conclusion**

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS T. RILEY whose telephone number is (571)270-1581. The examiner can normally be reached on Monday - Friday, 7:30-5:00, est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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